I. CLAIM AMENDMENTS

Claim 1. (Original) A method of producing a binding surface for a target molecule having a functional binding site, which method comprises:

(i) identifying within the target molecule an anchor site which is remote from the functional binding site;

(ii) generating a pharmacophore model for the anchor site;

(iii) using the pharmacophore model to identify an anchor site binding ligand; and

(iv) providing the anchor site binding ligand on a surface of a substrate such that the ability of the anchor site binding ligand to bind to the anchor site is preserved.

Claim 2. (Previously Presented) The method according to claim 1, where the anchor site is selected such that when the target molecule is bound to the binding surface, the functional binding site of the target molecule is orientated in such a way as to be available for a subsequent binding interaction with a complementary binding molecule.

Claim 3. (Previously Presented) The method according to claim 2, wherein the target molecule is a protein.

Claim 4. (Previously Presented) The method according to claim 2, wherein the target molecule is an antibody and the complementary binding molecule is an antigen.

Claim 5. (Currently Amended) The method according to claim 4, wherein the Fab ~~**fragment**~~ **region** of the antibody corresponds to the functional binding site and the anchor site is located on the Fc ~~**fragment**~~ **region** of the antibody.

Claim 6. (Previously Presented). The method according to claim 1, wherein anchor site is identified based on an understanding of the molecular architecture of the target molecule and on the binding characteristics of the functional binding site.

Claim 7. (Previously Presented). The method according to claim 1, wherein the pharmocophore model is a 3-D representation of molecular features defined by reference to at least four feature types.

Claim 8. (Previously Presented). The method according to claim 7, wherein the pharmacophore model is generated by reference to molecular features of the anchor site and/or by reference to molecular features of a set of one or more ligands already known to bind to the anchor site.

Claim 9. (Previously Presented). The method according to claim 7, wherein the anchor site binding ligand matches the pharmacophore model with respect to at least four feature types thereof.

Claim 10. (Previously Presented). The method according to claim 1, further comprising a docking step to ensure binding efficacy of the anchor site binding ligand to an anchor site of the target molecule.

Claim 11. (Previously Presented). The method according to claim 10, wherein the docking step is used to rank anchor site binding ligands according to their binding affinity for an anchor site of the target molecule.

Claim 12. (Previously Presented). The method according to claim 1, wherein multiple anchor site binding ligands are provided on the substrate surface to facilitate binding to respective anchor sites of the same target molecule.

Claim 13. (Previously Presented). The method according to claim 12, wherein the anchor site binding ligands are included as pendant groups on a polymer backbone that forms or is provided on the substrate surface.

Claim 14. (Previously Presented). The method according to claim 13, wherein the polymer is a copolymer of first and second monomers, wherein the first monomer is selected from styrene (optionally substituted), dimethly, acrylamide, acrylonitrile, N,N-dimethyl (or diethyl) ethyl methacrylate, 2-methacryloyloxy-ethyl-dimethyl-3-sulfopropyl-ammounium hydroxide, and methoxy PEG and the second monomer is selected from hydroxyethyl methacrylate, maleic anhydride, N-hydroxysuccinimide methacrylate ester, methacrylic acid, diacetone acrylamide, glycidyl methacrylate, PEG methacrylate and fumarates.

Claim 15. (Previously Presented). The method according to claim 13, wherein the polymer is modified by incorporation of a spacer between the polymer backbone and the anchor site binding ligand.

Claim 16. (Previously Presented). The method according to claim 1, wherein binding of the target molecule is achieved through interaction of at least one anchor site binding ligand and an anchor site of the target molecule, in combination with non-specific binding interactions between other surface components of the substrate and the target molecule.

Claim 17. (Previously Presented). The method according to claim 1, wherein binding of the anchor site binding ligand to an anchor site of the target molecule may be manipulated by controlling prevailing environmental conditions.

Claim 18. (Previously Presented). The method according to claim 1, wherein the target molecule is IgG and the anchor site binding ligand is selected from the group consisting of 5-(4-Hydroxymethyl-3-methoxyphenoxy)valeric acid (CAS 213024-57-8), 9-Fluorenylmethoxycarbonyl-L-phenylalaine (CAS 35661-40-6), Glycocholic acid hydrate (CAS 475-31-0) and 2,4-Dinitrophenyl-alpha-aminocaproic acid (CAS 10466-72-5).

Claim 19. (Previously Presented). The method according to claim 1, wherein the target molecule is IgG and the anchor site binding ligand is selected from group consisting of Mycophenolic acid (CAS 24280-93-1), Lavendustin A (CAS 125697-92-9), Pteroic acid (CAS 119-24-4), N10-(trifluoroacetyl)pteroic acid (CAS 37793-53-6), 3-Hydroxy-4-(2-hydroxy-4-sulfo-1-naphthyl azo)naphthalene-2-carboxylic acid (CAS 3737-95-9), N-4(Nitrobenzoyl)-6-aminocaproic acid, 5-(4-(2-Pyridylsulfamoyl)phenylazo)salicylic acid (CAS 599-79-1), 1,3,4,5-Tetrahydroxycyclohexanecarboxilic acid 3-[3,4-dihydroxycinnamate] (CAS 6001-76-9), Succinylsulfathiazole (CAS 116-43-8), Asp-Ala beta-naphthylamide, 3-carboxyumbellieferyl beta-D-galactopyranoside (CAS 64664-99-9), 4-(N-[2,4-Diamino-6-pteridinylmethyl]-N-methylamino)benzoic acid hemihydrochloride (CAS 19741-14-1), L-Glutamic acid gamma-(7-amido-4-methylcoumarin) (CAS 72669-53-5), His-Ser (CAS 21438-60-8), N-[7-Nitrobenz-2-oxa-1,3-diazol-4-yl]aminohexanoic acid (CAS 88235-25-0), Tyr-Ala (CAS 730-08-5), N-epsilon-Trifluoracetyl-Lys-Pro (CAS 103300-89-6), N-10-(Trifluoracetyl)pteroic acid (CAS 37793-53-6), Ala-Trp (CAS 16305-75-2), Ala-His (CAS 3253-27-6), and N-(2,4-Dinitrophenyl)-L-tryptophan (CAS 1655-51-2).

Claims 20-22. Cancelled.

Claim 23. Cancelled.

Claim 24. Cancelled.

Claims 25-32. Cancelled.

Claim 33. (Previously Presented) A binding surface produced in accordance with the method of claim 1,

wherein multiple anchor site binding ligands are provided on the substrate surface to facilitate binding to respective anchor sites of the same target molecule; and

wherein the anchor site binding ligands are included as pendant groups on a polymer backbone that is formed or is provided on the substrate surface; and

wherein the polymer is a copolymer of first and second monomers, wherein the first monomer is selected from styrene (optionally substituted), dimethyl, acrylamide, acrylonitrile, N,N-dimethyl (or diethyl) ethyl methacrylate, 2-methacryloyloxy-ethyl-dimethyl-3-sulfopropyl-ammounium hydroxide, and methoxy PEG and the second monomer is selected from hydroxyethyl methacrylate, maleic anhydride, N-hydroxysuccinimide methacrylate ester, methacrylic acid, diacetone acrylamide, glycidyl methacrylate, PEG methacrylate and fumarates.

Claim 34. Cancelled.

Claims 35-36. Cancelled.

Claim 37. (Previously Presented). A binding surface produced in accordance with the method of claim 1, wherein the target molecule is IgG and the anchor site binding ligand is selected from the group consisting of 5-(4-Hydroxymethyl-3-methoxyphenoxy)valeric acid (CAS 213024-57-8), 9-Fluorenylmethoxycarbonyl-L-

phenylalanine (CAS 35661-40-6), Glycocholic acid hydrate (CAS 475-31-0) and 2,4-Dinitrophenyl-alpha-aminocaproic acid (CAS 10466-72-5).

Claim 38. (Previously Presented). A binding surface produced in accordance with the method of claim 1, wherein the target molecule is IgG and the anchor site binding ligand is Mycophenolic acid (CAS 24280-93-1), Lavendustin A (CAS 125697-92-9), Pteroic acid (CAS 119-24-4), N10-(trifluoracetyl)pteroic acid (CAS 37793-53-6), 3-Hydroxy-4-(2-hydroxy-4-sulfo-1-naphthyl azo)naphthalene-2-carboxylic acid (CAS 3737-95-9), N-(4-Nitrobenzoyl)-6-aminocaproic acid, (5-(4-2-Pyridylsulfamoyl)phenylazo)salicylic acid (CAS 599-79-1), 1,3,4,5-Tetrahydroxycyclohexanecarboxilic acid 3-[3,4-dihydroxycinnamate] (CAS 6001-76-9), Succinylsulfathiazole (CAS 116-43-8), Asp-Ala beta-naphtylamide, 3-carboxyumbelliferyl beta-D-galactopyransoide (CAS 64664-99-9), 4-(N-[2,4-Diamino-6-pteridinylmethyl]-N-methylamino)benzoic acid hemihydrochloride (CAS 19741-14-1), L-Glutamic acid gamma-(7-amido-4-methylcoumarin) (CAS 72669-53-5), His-Ser (CAS 21438-60-8), N-[7-Nitrobenz-2-oxa-1,3-diazol-4-yl]aminohexanoic acid (CAS 88235-25-0), Tyr-Ala (CAS 730-08-5), N-epsilon-Trifluoracetyl-Lys-Pro (CAS 103300-89-6), N-10-(Trifluoracetyl)pteroic acid (CAS 37793-53-6), Ala-Trp (CAS 16305-75-2), Ala-His (CAS 3253-17-6), and N-(2,4-Dinitrophenyl)-L-tryptophan (CAS 1655-51-2).

Claim 39. Cancelled.

Claim 40. Cancelled.

Claims 41-46. Cancelled.